## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Carl Dvorak Serial No.: 10/052,659 Filed: January 18, 2002

Title: Healthcare Information System With Clinical Information Exchange

Art Unit: 3626

Examiner: Glass, Russell S. Our Ref.: 310265.90236

Commissioner for Patents Washington DC 20231

## Box: Amendment

Dear Sir:

In response to the Office Action dated August 7, 2008, please enter the following remarks in the above referenced application.

## REMARKS

The paragraph numbers hereafter correspond to the paragraph numbers in the most recent Office Action.

2-3. The Office Action rejected each of claims 1-8 and 14-20 as obvious over Morange in view of Felsher and Smithies. Applicant strongly traverses this rejection for several reasons.

First, with respect to claim 1, claim 1 requires, among other things, a cross reference table that includes a <u>list of applications</u> on a network <u>and distinct patient identification numbers</u> for each of at least two of the applications on the list and <u>using information from the reference table to generate a second query</u> to a second application.

Neither Morange nor Felsher teach or suggest applications that use different patient identifiers for the same patient as correctly recognized in the most recent Office

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Action.

However, despite contrary assertions in the Office Action, neither Morange nor Felsher teach or suggest several other steps required by claim 1. First, neither Felsher nor Morange teaches a reference table that stores a list of applications and identification numbers used by the applications. The sections of Felsher cited as teaching this limitation simply do not. More specifically, paragraph 266 teaches that transactions (i.e., data in a record that is related to a medical event such as a blood test, radiological data, an admission record, etc. – see paragraph 267)) for a single patient are all indexed using a single unique patient identifier (e.g., an SS number), paragraph 267 teaches that metadata associated with and rules for accessing transaction records are stored outside the records to facilitate access thereto, paragraph 268 teaches that records may comprise a subset of files that are distributed and indexed and none of the cited paragraphs teaches or suggests a table listing applications and associated patient identifiers and paragraph 279 teaches that one system architecture includes databases of records, an index relating patient IDs to database records and a certification authority.

Second, while Felsher may contemplate a system that includes multiple applications, Felsher clearly does not teach or suggest that a second query is generated for a second application in response to reception of a first query at an exchange server. To this end, Felsher teaches a system that includes a custodian medical record system that renders records related to medical transactions (see paragraph 264) available to different applications. To this end, as records are created, the records are stored. Records may be stored with the custodian medical record system or, in the alternative, in other locations as part of a distributed database (see paragraph 268). Where records are stored in a distributed database, Felsher teaches that a central index is maintained by the custodian medical record system which records, for each patient, the location of the record (i.e., the transaction) along with access rules (e.g., metadata and access rules — see paragraphs 267 and 268).

Where a second application creates and stores a record and the location of that record is indexed by the custodian system, when the stored record is subsequently

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required by a first application, a single query is provided to the custodian system (see paragraph 264) and the custodian system can use the index to <u>directly access the record in the database</u>. Thus, because Felsher contemplates a system wherein the custodian system can directly access a required record, there is no reason for the custodian system to generate a second query to be provided to the second application. In short, Felsher simply teaches a distributed database where a custodian system indexes records for patients so that applications that generate the records do not have to be employed after record storage to access the records.

Turning to paragraph 264 in Felsher which was cited in the Office Action as teaching that a second query is generated, that paragraph only teaches that a single query is transmitted from a recipient (i.e., from the application that generates the query) to the custodian medical records system (see lines 6-9). Here, there is no second query, only a first. As explained above, to the extent that the custodian medical record system has to access required data through an index to another database or a specific storage location, that indexed access is not a second query and instead is simply use of a direct pointer to the location where the required data is stored.

Thus, Morange and Felsher fail to teach or suggest several claim 1 limitations.

Turning to Smithles, Smithles fails to teach or suggest what the other references lack. First, while Smithles appears to contemplate a system including a database 12 (see Fig. 1) that stores a list of different patient identifiers for a specific patient, Smithles fails to teach or suggest a reference table like the one in claim 1 that includes <u>both</u> a list of applications and associated patient identifiers. In this regard, Smithles teaches a system wherein a signature verification service is provided to multiple applications via a network (see abstract and Fig. 1 generally). To accomplish this task, Smithles teaches that database 12 is provided where model information indicative of a user's signature is stored. When an application employs the verification service a first time, the application transmits a message to the service indicating that the service is required where the message includes (1) information that can be used to uniquely identify a person whose signature is to be authenticated (see col. 8, lines 50 and 53) and (2) a signature of the

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person to be authenticated (or information derived from the signature for comparison to the model signature information). Once the system identifies the identity of the person, the person's stored signature information is retrieved and compared to the signature information received from the application. Where the signature information matches within a threshold, the signature is authenticated.

In addition, once a match occurs between signature information, the application generates an application unique patient identifier (AUID) (see col. 18, lines 42-44) and provides that unique identifier to the database 12 during a registration process. The unique patient identifier forms the basis for a new record for the person and is associated with the signature and is cross linked with other records for the person that were generated by other applications (see col. 18, lines 52-56). Thereafter, when the application wants to subsequently authenticate the same person's signature, the application need only transmit the AUID to the database which can then be used by the database to retrieve the signature information for the person (see col. 18, lines 49-51).

In the above description, while the database may in fact store a list of person IDs used by different applications to reference a single person, there is absolutely no reason why such a database also has to include a list of applications associated with the person IDs. Consistent with this understanding Applicant has examined Smithies in detail and there is no teaching that a list of applications is stored along with the person identifiers.

Second, like Morange and Felsher, Smithies fails to teach or suggest responding to an inquiry from a first application by transmitting a query to a second application based on information in the reference table (i.e., based on the application list and associated or corresponding patient identifiers in the table). In fact, because Smithies only teaches that a list of patient IDs are stored and not a list of associated applications, Smithies cannot teach a way to generate a second query to a second application based on information in the reference table. In short, because Smithies fails to teach or suggest an application list, there is no way for Smithies to determine which patient ID numbers are associated with which applications if a second query were to be generated.

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For at least these reasons Applicant believes claim 1 and claims that depend there from are non-obvious over the cited references. In the event that the Examiner maintains this rejection Applicant requests that the Examiner clearly point out any suggestion in any one of the references that an exchange server can receive a query from a first application and generate a query to a second application – After a detailed examination of the cited references Applicant is clear that none of the references even remotely suggests this limitation.

Each of claims 5, 14, 18, 19 and 20 requires limitations similar to the limitations described above with respect to claim 1 and each is believed to be non-obvious for essentially the same reasons described above with respect to claim 1.

For at least the above reasons Applicant believes each of claims 1, 5, 14, 18, 19 and 20 recites patentable subject matter and respectfully requests that the current rejections be withdrawn.

Applicant has introduced no new matter in making the above amendments and remarks. In view of the above remarks and amendments, Applicant believes claims 1-8 and 14-20 of the present application recite patentable subject matter and allowance of the same is requested. No fee in addition to the fees already authorized in this and accompanying documentation is believed to be required to enter this amendment, however, if an additional fee is required, please charge Deposit Account No. 17-0055 in the amount of the fee.

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Respectfully submitted,

CARL DVORAK

Date: 2-4-09

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